PRESERVATION OF VEGETATION AND VEGETATED BUFFER STRIPS

Definition

Minimizing exposed soils and consequent erosion by clearing only where construction will occur and using strips of existing or established vegetation to filter stormwater runoff.

Condition Where Practice Applies

- ✓ Preservation of existing vegetation on any site will lower the potential for erosion and sedimentation.
- ✓ Vegetation should be preserved on slopes steeper than 15 percent, near perennial and intermittent watercourses or swells, and on construction sites in wooded areas.
- ✓ Maintain vegetative buffer or filter strip at the base of a slope to retain sediment on site.

Advantages

No or little cost - most lots have existing vegetation suitable for retention as an erosion and sediment control measure.

Preserving vegetation will:

- ✓ Help reduce soil erosion.
- ✓ Reduce stormwater runoff.
- ✓ Beautify an area.
- ✓ Save money on erosion control and landscaping costs.
- ✓ Provide areas for wildlife.
- ✓ Provide buffers and screens against noise and visual impacts.
- ✓ Moderate temperature changes, provide shade, and cover habitat for surface waters and land.

Disadvantages/Problems

- ✓ Saving individual trees can be difficult, and older trees may become a safety hazard. However, problem trees can be removed while preserving healthy trees and underbrush.
- ✓ Less room to work on small lots.

Design Criteria

1. For the purposes of meeting minimum sediment removal requirements on small lots, all stormwater leaving a site should be routed through a thickly vegetated strip of at least 25' feet in width.
2. Construct small berms or use shallow swales to direct stormwater to the vegetated strips. Stormwater should be dispersed through the strip as much as practical, rather than concentrated at a single point and allowed to flow through the strip in a narrow course. Effectiveness of sediment removal in vegetated strips is related to density of stems, so that sparse vegetation may require greater widths. More than one strip may be required if stormwater leaves the site at more than one point.
3. Vegetation can also be preserved in natural clumps or as individual trees, shrubs, and vines. The preservation of individual plants is more difficult because equipment is generally used to remove unwanted vegetation. Clearly flag or mark areas around areas of vegetation or individual trees that are to be saved. It is preferable to keep ground disturbance away from the trees at least as far out as the dripline (the outward edge of the branches).

Maintenance

- ✓ Check the path of stormwater and points of stormwater discharge into vegetated strips to ensure no channels are being cut. If necessary, level the point of discharge over a wide area to maximize dispersal through the strip, rather than having stormwater follow a narrow course through the strip.
- ✓ Inspect flagged areas regularly to make sure flagging has not been removed. If tree roots have been exposed or injured, recover and/or seal them.